Utah Health Status Update:

Chlamydia and Gonorrhea Infection as a Reproductive Health Issue

June 2008

Utah Department of Health

Chlamydia is the most commonly reported infectious disease in the U.S.; over one million cases were reported in the U.S. in 2006. Chlamydia has been the most frequently reported infectious disease in Utah for at least the last ten years.

Numbers of reported chlamydia and gonorrhea cases have been increasing for several years in Utah. Over the past five years, reported chlamydia cases have increased by 48% and gonorrhea cases by 123%. Adolescents and young adults are the age groups at greatest risk for acquiring a sexually transmitted disease (STD). Over two-thirds of Utah's chlamydia cases have been reported among females (69% in 2007), with females, aged 15–24, accounting for 49% of all reported chlamydia infections during 2007. During 2007, 42% of reported gonorrhea cases were among females, with 16% reported among the 15–24 age group.

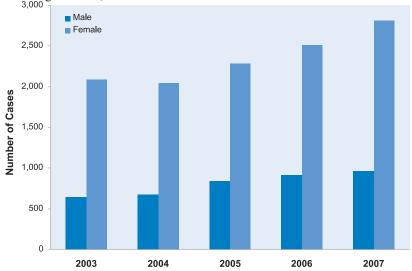
Chlamydia infection is usually asymptomatic and often goes unrecognized and untreated; chlamydia is often referred to as the "silent epidemic." Thirty to eighty percent of women with gonorrhea have no symptoms and 85% of women with chlamydia have no symptoms to indicate that they are infected. Left untreated, chlamydia and gonorrhea can cause serious reproductive health problems, including short-term (e.g. pelvic inflammatory disease, pregnancy complications) and longterm consequences (e.g. infertility, ectopic pregnancy, and chronic pelvic pain leading to hysterectomy). Women and young women in particular are much more likely to suffer serious consequences of STDs.

Pelvic Inflammatory Disease

One of the most serious threats to the reproductive capability of women is infection of the upper genital tract, referred to as pelvic inflammatory disease (PID). Most cases of PID are associated with untreated chlamydia or gonorrhea infections, which initially involve the cervix, but can spread into the uterus, tubes and abdominal cavity. Each year, more than one

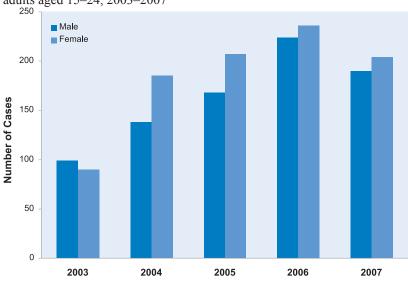
Chlamydia, Ages 15–24

Figure 1. Number of reported chlamydia cases, Utah adolescents and young adults aged 15–24, 2003–2007 $_{\rm 3,000}$



Gonorrhea, Ages 15–24

Figure 2. Number of reported gonorrhea cases, Utah adolescents and young adults aged 15–24, 2003–2007



million U.S. women experience an episode of PID. It is estimated that 10–30% of women with untreated chlamydia infections, and 10–45% of women with untreated gonorrhea infection develop PID. Some cases of PID require surgical intervention. At least 25% of women with acute pelvic inflammatory disease will experience serious long-term sequelae. Of women who have had PID, one in five will become infertile; one in ten will have a tubal pregnancy; and about 20% of women will experience chronic pelvic pain. Sixty percent of the women diagnosed with

PID will have "silent" PID; that is, they experience only mild symptoms or no symptoms. This form of PID is less likely to be detected and treated, thus placing women at increased risk of subsequent complications.

An average of 635 women are treated for PID at Utah's emergency departments each year. Women between the ages of 15–34 comprise 75% of these visits. The average charge associated with those visits, as reported, was \$3,100 per visit or \$1,968,000 per year (data from Utah's Emergency Department Database). Early treatment of PID can be easily managed with a regime of antibiotics, for under \$50 per client, as opposed to delayed treatment which could result in hospitalization at an average cost of \$11,000. Nearly 1,400 Utah women are hospitalized each year for PID.

Ectopic Pregnancy

PID can permanently damage the fallopian tubes, uterus and surrounding tissues, leading to infertility, ectopic pregnancy (pregnancy outside the uterus), and chronic pelvic pain.

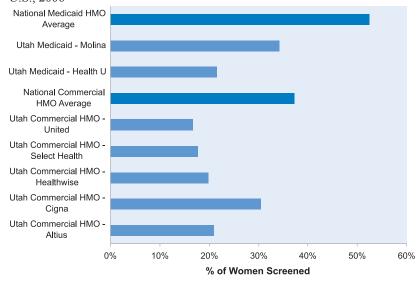
An ectopic pregnancy usually results from partial blockage due to pelvic inflammatory disease. After one episode of PID, a woman is six to ten times more likely to have an ectopic pregnancy than women who have not had PID. Approximately 9% of women with laparoscope-confirmed pelvic inflammatory disease experience an ectopic pregnancy for their first pregnancy after the episode of PID.

The average hospital charge for an ectopic pregnancy is approximately \$8,819 per patient. Twelve percent (12%) of women with silent PID may be infertile and approximately 25% will often require an infertility work-up. Data from Utah's Pregnancy Risk Assessment Monitoring System suggest that of all women delivering a live birth between 2004 and 2006 (152,913) 5.3% of them received reproductive assistance to get pregnant. Reproductive assistance included the use of reproductive technology, fertility enhancing drugs, artificial insemination and other treatments.

The costs associated with the complications resulting from untreated chlamydia or gonorrhea infections can be reduced significantly. The 2007 Sexually Transmitted Diseases Treatment Guidelines, released by CDC in February, recommended that all sexually active women under 25 years of age receive

Chlamydia Screening in Women

Figure 3. Percentage of sexually active women aged 16–25 in HMOs who had at least one test for chlamydia during the measurement year, Utah and U.S., 2006



annual screening. Utah's 2007 Performance Report for HMOs evaluated the chlamydia screening rates among sexually active women, ages 16–25 cared for by Utah HMOs. Those data indicated that rates of this recommended preventive screening test were lower than national averages at both commercial and Medicaid HMOs. Chlamydia screening in women has been demonstrated to reduce both the prevalence and rates of PID.

References:

Office of Health Care Statistics. 2007 Performance Report for Utah Commercial HMOs and Medicaid & CHIP Health Plans, Performance Measures (HEDIS) and Consumer Satisfaction Survey Results (CAHPS). Accessed at: http://health.utah.gov/hda/Reports/hmo/index.php

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For additional information about this topic, contact the Bureau of Communicable Disease Control, Utah Department of Health, P. O. Box 142105, Salt Lake City, UT 84114-2105, (801) 538-6096, FAX (801) 538-9913, or visit http://www.health.utah.gov/els; or the Office of Public Health Assessment, Utah Department of Health, Box 142101, Salt Lake City, UT 84114-2101, (801) 538-6108, FAX (801) 538-9346, email: phdata@utah.gov